Silver Linings in the Demographic Revolution

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We always overestimate the effects of technology and underestimate the effects of demography. While we are fussing about the artificial-intelligence revolution, a demographic revolution may have much more radical consequences. For the first time in history, there are more old people than young ones in the United States, and this trend will only accelerate worldwide. Psychological science may play an especially important role in dealing with this revolution.

First, the good news. Here is a truly remarkable, extraordinary, indeed miraculous fact about me: I’m 67 years old and my parents, husband, five brothers and sisters, three children, five grandchildren, nine nephews and nieces, and six great-nephews and great-nieces are all alive. None of them have died. That may sound a bit anticlimactic, but for almost all of human history it really would have been miraculous. I was reading the new biography of Samuel Adams, and one sentence, in passing, tells you that he lost four of his six children. That would be an unimaginable tragedy now, but it was common then, even if it still meant devastating grief (just read the letters and diaries). In the United States, until about 100 years ago at least, one in five children died before they were five years old, according to Our World in Data.

As Steven Johnson has written in his wonderful book, Extra Life: A Short History of Living Longer, life expectancy has doubled over the past 100 years or so. This amazing human achievement is the result of hard-fought and often unheralded advances in science and public health, from vaccines to sewers to rehydration salts.
But as happens so often in human history, this remarkable advance has brought its own challenges. Many fewer people die young, which inevitably means that many more people grow old. The human life span itself hasn’t changed much. Some people have always lived to a ripe old age; Sam Adams himself lived into his 80s, and his famous cousin John made it to 90. Instead, average life expectancy has changed because there are many more people who make it to the end of that span.

At the same time, we are having fewer children. In the United States, the average birth rate went from 3.94 in 1900 to 2.06 in 2000. This trend has been underway for decades. By the mid-1960s in this country, for the first time, there were more people over 65 than children under 5, and the trend has accelerated since.

What will we do with all these elders? Nowadays, the conversation in almost any gathering of middle-aged people like me will eventually turn to worried stories about aging parents. Who will take care of them? Should they sell the house they’ve lived in for 50 years? Move across the country to be with their children? Can they afford an assisted-living facility? Of course, it’s wonderful that all our parents are still around to worry about. But the worries are real nonetheless and even more worrying because we know that we will face the same dilemmas ourselves soon enough (though as my own grandmother used to say about aging, “Consider the alternative!”).

Psychological science may help us to understand and deal with these challenges and also to see that they may be a source of new opportunities. In my first Observer column during this year as APS President, I talked about the distinctive human “life history,” the way our lives change over time. At the 2023 APS Convention in late May, the plenary sessions will focus on how this life history unfolds and what it means for practical policies, from the effects of adversity on the infant brain, to adolescent exploration, to the psychology of aging. I’ve talked a lot about childhood in these columns, so it’s appropriate that what is sadly my last column (sniff!) should look to the other end of life.

We humans have a much longer childhood than our closest primate relatives. But we also developed a distinctive “elderhood.” We live much longer than our closest primate relatives and always have. Chimps usually die when they are around 50, but humans—even in hunter-gatherer cultures—can live at least until our 70s and 80s. Those bonus years are especially puzzling because women, at least, stop reproducing after menopause.

Those later years may be adapted to allow us to care and teach. Instead of striving to get mates and resources and a place in the pecking order, we focus on helping the next generation. We take care of others and pass on our resources, skills, and knowledge instead of working to ensure our own success. APS Janet Taylor Spence Awardee and Fellow Patricia Lockwood has shown that, across a wide range of cultures and circumstances, elders are intrinsically more altruistic, more likely to share and help others.
Older people are especially well suited to share knowledge and information and so contribute to our distinctively human intelligence. For instance, elders may have a special place in the processes of teaching and cultural transmission, which are so important for human success. In order to thrive, humans have always had to master complex skills. People in hunter-gatherer cultures must learn foraging, hunting, cooking, and toolmaking. Many of these skills require years of practice: hunters don’t reach their peak until they are in at least their mid-30s. To learn a complex skill, you also need patient teachers who can pass on their accumulated wisdom and technique.

But there is a catch. It’s hard to simultaneously teach someone else to do something and do it effectively yourself (in our house, Sunday pancakes take twice as long to make when the grandkids help). The anthropologist Michael Gurven suggests that the best evolutionary strategy is to have the old teach the young. Let the peak, prime-of-life performers concentrate on getting things done, and match the younger learners with older, more knowledgeable, but less productive teachers. Gurven and his colleagues analyzed over 20,000 observations from more than 40 different locations and found this was the pattern in many different hunting cultures. The grandparents weren’t as strong or effective hunters as the 30-year-olds, but they were the best teachers.

There is good evidence that, during human evolution, highly skilled, root-digging grandmothers helped provide calories for smart, hungry, young toddler brains. But they fed those brains important information, too. Strikingly, orcas, who are the only other mammals with post-menopausal grandmothers, also are among the few animals who have clear cultural traditions passed on from grandmother to grandchild.

For instance, orca grandmothers pass on food traditions, like eating krill rather than salmon. In much the same way, Gurven shows that human grandparents in forager communities pass on songs and stories, as well as recipes. Adult parents are often preoccupied with teaching children the skills that will get them through the day, but grandparents get to pass on the big cultural ideas, the myths and proverbs that capture the wisdom of the past (or, in our house, ricotta pancake recipes and Broadway show tunes.)

There may be other benefits to elderhood. We get slower, creakier, and stiffer as we get older, but we also get happier. This may seem surprising, but it’s one of the most robust results in psychology, and it’s true regardless of income, class, or culture. Up through our 70s and 80s—really, until we get very sick—we are happier than when we were strong and beautiful 20-year-olds. Laura Carstensen at Stanford, another APS Fellow and a leader in the study of aging, suggests that as our time ahead dwindles and we have fewer decisions to make and resources to get, we focus more on the positive parts of the time we have left. (Read my predecessor Jennifer Eberhardt’s interview with Carstensen.) We sometimes sigh “life is too short” when we duck out of some unnecessary conflict—and it gets shorter the older we get.
Our happiness may also lie in the very fact that we are no longer focused on achieving immediate goals for ourselves, such as finding mates and achieving dominance. When someone asked an aging Sophocles how it felt to lose sexual desire, he replied that “it was like being released from the grip of a mad tyrant.” We might say the same about our adult desire for wealth and fame—or even academic citations.

Childhood and elderhood may have interacted to create a coevolutionary cascade that led to the remarkably swift emergence of homo sapiens. A longer, smarter, more social childhood and an extended caring, teaching old age, lets you develop more skilled adults who can produce more calories and afford more care and cooperation, and so can allow an even longer, smarter and more social childhood in the next generation.

It turns out that childhood and old age—those vulnerable, unproductive periods of our lives—are the biological key to many of our most valuable, deeply human capacities: exploration and creativity, cooperation, coordination, and culture, learning, and teaching. In some ways, we are at our most human before puberty and after menopause.

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So, caring for those vulnerable humans at either end of life lets us all flourish. But the demographic crisis is making us realize that we haven’t been doing a good job of taking care of the young and the old, even in the richest country on earth. Eldercare workers, like childcare workers, have little pay and less status. Care is economically invisible, and childcare centers and nursing homes are an underfunded patchwork. Worst of all, we isolate children and older people from each other and from the rest of us. Both groups flourish when they can engage in this very human project of teaching and learning, but we make it really hard to do.

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There are ways that we could change the physical environment to help fix this. The sprawl of contemporary cities makes intergenerational relationships particularly difficult to establish and maintain. Parents work in one place, children are cared for in another, and elders live in a third, often with long commutes in between. Before industrialization, most people lived on farms or in small towns, where work and family were in close proximity. One positive effect of the pandemic has been to make people realize that this could also be true in a postindustrial age. There is increasing demand for multigenerational housing, with grandparents, parents, and children living separately but close by.

What’s more, the relationship between elders and children doesn’t have to depend on biological kinship. California’s universal preschool initiative needs lots of well-trained teachers. Many older people miss the chance to be with children and need more financial support than they get through Social Security, so why not have a “grandparent corps”? Give elders a chance to become the officially designated “grandparent” for preschool classes, receiving a small salary, providing everyday care and love, and passing on stories of the past.

So here’s my pitch as I complete my term as APS President: Let’s appreciate our brilliant, fragile young human learners and our wise, vulnerable, old human teachers, and genuinely bring the two groups together. The demographic revolution may mean that we will need to put more resources into caring for elders. But it may also let every child grow up in a village full of grandparents.

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